

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

TIP TOP SOLVENT LIQUID BUFFER SPRAY

#### Art.-No.

505 9692, 505 9693

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Cleaning agent

### 1.3. Details of the supplier of the safety data sheet

Company name: REMA TIP TOP AG  
Street: Gruber Strasse 63  
Place: D-85586 Poing  
Telephone: +49 (0) 8121 / 707 - 0

Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

### 1.4. Emergency telephone number:

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)  
England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24  
24

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture according to 1272/2008/EC

Hazard categories:

Aerosol: Aerosol 1

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes serious eye irritation.

Causes skin irritation.

May cause drowsiness or dizziness.

Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Hazardous components which must be listed on the label

Ethyl acetate

Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes

Hydrocarbons, C6, isoalkanes, < 3% n-hexane

Signal word: Danger

Pictograms:



#### Hazard statements

H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.  
H319 Causes serious eye irritation.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

**TIP TOP SOLVENT LIQUID BUFFER SPRAY**

Revision date: 19.10.2015

Revision No: 2,1

Product code: 00156-0090

P211	smoking.
P251	Do not spray on an open flame or other ignition source.
P261	Do not pierce or burn, even after use.
P403	Avoid breathing spray.
P410+P412	Store in a well-ventilated place.
	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**2.3. Other hazards**

In use, may form flammable/explosive vapour-air mixture.

Heating will cause pressure rise with risk of bursting.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Chemical characterization**

Preparation with aliphatic hydrocarbons (free of aromatic hydrocarbons)

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
141-78-6	Ethyl acetate			25 - 50 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes			10 - 25 %
	927-510-4		01-2119484651-34	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
106-97-8	Butane			10 - 25 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1; H220			
74-98-6	Propane			10 - 25 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1; H220			
	Hydrocarbons, C6, isoalkanes, < 3% n-hexane			10 - 25 %
	931-254-9		01-2119484651-34	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
75-28-5	Isobutane			2,5 - 10 %
	200-857-2	601-004-00-0	01-2119485395-27	
	Flam. Gas 1; H220			
110-82-7	Cyclohexane			< 1 %
	203-806-2	601-017-00-1	01-2119463273-41	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H225 H315 H336 H304 H400 H410			
110-54-3	n-Hexane			< 1 %
	203-777-6	601-037-00-0	01-2119480412-44	
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 2; H225 H361f H315 H336 H373 H304 H411			

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.

**TIP TOP SOLVENT LIQUID BUFFER SPRAY**

Revision date: 19.10.2015

Revision No: 2,1

Product code: 00156-0090



Take away from danger area and lay down affected person.

**After inhalation**

Move to fresh air in case of accidental inhalation of vapours.  
In the event of symptoms refer for medical treatment.

**After contact with skin**

Wash off with soap and plenty of water.  
Consult a doctor if skin irritation persists.

**After contact with eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Seek medical treatment by eye specialist.

**After ingestion**

Do not induce vomiting.  
Rinse mouth.  
Never give anything by mouth to an unconscious person.  
Summon a doctor immediately.  
Induce vomiting only upon the advice of a physician.

**4.2. Most important symptoms and effects, both acute and delayed**

Causes serious eye irritation.  
Causes skin irritation.  
May cause drowsiness or dizziness.  
Repeated exposure may cause skin dryness or cracking.  
Attention. Beware, danger of aspiration.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptoms.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Alcohol-resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>), water-spray.

**Unsuitable extinguishing media**

Full water jet.

**5.2. Special hazards arising from the substance or mixture**

Fire may produce:  
Carbon monoxide and carbon dioxide

**5.3. Advice for firefighters**

Use breathing apparatus with independent air supply.  
Protective suit.

**Additional information**

Heating will cause pressure rise with risk of bursting.  
Cool containers at risk with water spray jet.  
Vapours can form an explosive mixture with air.  
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

In case of vapour formation use respirator.  
Use only explosion-proof equipment.  
Ensure adequate ventilation.  
Use personal protective clothing.  
Keep away sources of ignition.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/ground water.  
Do not discharge into the subsoil/soil.

**6.3. Methods and material for containment and cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

**TIP TOP SOLVENT LIQUID BUFFER SPRAY**

Revision date: 19.10.2015

Revision No: 2,1

Product code: 00156-0090



Shovel into suitable container for disposal.

**6.4. Reference to other sections**

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Avoid contact with the skin and the eyes.

Use only in thoroughly ventilated areas.

**Advice on protection against fire and explosion**

Do not smoke - volatile.

Keep away from open flames, hot surfaces and sources of ignition.

Pay attention to anti-explosion rules.

Do not spray on a naked flame or any other incandescent material.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Protect against direct sun radiation.

Keep container tightly closed.

Use only in well-ventilated areas.

Avoid temperatures above 50°C.

**Advice on storage compatibility**

Incompatible with oxidizing agents.

**Further information on storage conditions**

Keep away from food, drink and animal feeding stuffs.

**7.3. Specific end use(s)**

Cleaning agent

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
110-82-7	Cyclohexane	100	350		TWA (8 h)	WEL
		300	1050		STEL (15 min)	WEL
141-78-6	Ethyl acetate	200	-		TWA (8 h)	WEL
		400	-		STEL (15 min)	WEL
110-54-3	n-Hexane	20	72		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

**8.2. Exposure controls****Protective and hygiene measures**

Avoid contact with eyes and skin.

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Remove and wash contaminated clothes before re-use.

Do not breath vapours or spray mist.

**Eye/face protection**

Safety goggles with side protection (EN 166).

Eye wash bottle with pure water (EN 15154).

**TIP TOP SOLVENT LIQUID BUFFER SPRAY**

Revision date: 19.10.2015

Revision No: 2,1

Product code: 00156-0090



**Hand protection**

Protective gloves resistant to chemicals made of nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Camatril Velours 730> made by www.kcl.de.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

**Skin protection**

Long sleeved clothing (EN 368).

**Respiratory protection**

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Aerosol
Colour:	Colourless
Odour:	Fruity

**Changes in the physical state**

Flash point:	< 0 °C
Lower explosion limits:	n.d.
Upper explosion limits:	n.d.
Ignition temperature:	n.d.
Vapour pressure: (at 20 °C)	3000 hPa
Vapour pressure: (at 50 °C)	< 10000 hPa
Density (at 20 °C):	0,658 g/cm <sup>3</sup>
Water solubility: (at 20 °C)	Immiscible

**9.2. Other information**

No data available.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No decomposition if stored and applied as directed.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Reactions with oxidizing agents.

**10.4. Conditions to avoid**

Vapours may form explosive mixture with air.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

Heating will cause pressure rise with risk of bursting.

**10.5. Incompatible materials**

oxidizing agents

**10.6. Hazardous decomposition products**

Carbon monoxide and carbon dioxide.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**TIP TOP SOLVENT LIQUID BUFFER SPRAY**

Revision date: 19.10.2015

Revision No: 2,1

Product code: 00156-0090



**Acute toxicity**

Based on available data, the classification criteria are not met.

No toxicological data available.

Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes

LD50/oral/rat: > 5840 mg/kg (OECD 401)

LD50/dermal/rat: > 2920 mg/kg (OECD 402)

LC50/inhalation/rat: > 23,3 mg/l/4 h

Hydrocarbons, C6, isoalkanes, < 3% n-hexane

LD50/oral/rat: 16570 mg/kg (OECD 401)

LD50/dermal/rat: 3350 mg/kg (OECD 402)

LC50/inhalation/rat: 259354 mg/m<sup>3</sup>/4 h

Ethyl acetate

LD50/oral/rat: 4935 mg/kg

LD50/dermal/rat: > 5000 mg/kg

LC50/inhalation/rat: 30 mg/l/4 h

**Irritation and corrosivity**

Causes serious eye irritation.

Causes skin irritation.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

May cause drowsiness or dizziness. (Ethyl acetate), (Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes), (Hydrocarbons, C6, isoalkanes, < 3% n-hexane), (Cyclohexane), (n-Hexane)

**Severe effects after repeated or prolonged exposure**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Additional information on tests**

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

**Practical experience**

**Other observations**

High concentration of vapours may cause irritation to eyes and respiratory system and produce narcotic effects.

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

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**SECTION 12: Ecological information**

**12.1. Toxicity**

Ecological data are not available.

Toxic to aquatic life with long lasting effects.

Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes

LC50/Oncorhynchus mykiss/96 h = 13,4 mg/kg

NOEC/Oncorhynchus mykiss/28 d = 1,534 mg/l

EC50/Daphnia magna/48 h = 3,0 mg/l

NOEC/Daphnia magna/21 h = 0,17 mg/l

ErC50/Pseudokirchneriella subcapitata/48 h = 20 mg/l

Hydrocarbons, C6, isoalkanes, < 3% n-hexane

LC50/Oncorhynchus mykiss/96 h = 18,27 mg/l

NOEC/Oncorhynchus mykiss/28 d = 4,089 mg/l

EC50/Daphnia magna/48 h = 31,9 mg/l

NOEC/Daphnia magna/21 h = 7,138 mg/l

ErC50/Pseudokirchneriella subcapitata/48 h = 3,034 mg/l

Ethyl acetate

**TIP TOP SOLVENT LIQUID BUFFER SPRAY**

Revision date: 19.10.2015

Revision No: 2,1

Product code: 00156-0090



LC50/EC50/EC50 : > 100 mg/l

Cyclohexane

EC50/Daphnia magna/48 h = 0,9 mg/l

IC50/Selenastrum capricornutum/72 h > 4 mg/l

n-Hexane

LC50/Fish/96 h = 1 - 10 mg/kg

EC50/Daphnia magna/48 h = 1 - 10 mg/kg

**12.2. Persistence and degradability**

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

**12.6. Other adverse effects**

Hazardous water pollutant.

**Further information**

Do not flush into surface water or sanitary sewer system.

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**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Advice on disposal**

Can be incinerated, when in compliance with local regulations.

Where possible recycling is preferred to disposal.

**Waste disposal number of waste from residues/unused products**

150111 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers  
Classified as hazardous waste.

**Contaminated packaging**

Offer empty spray cans to an established disposal company.

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**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.1



Classification code: 5F  
Limited quantity: 1 L / 30 kg  
Excepted quantity: E0  
Transport category: 2  
Tunnel restriction code: D

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS

**TIP TOP SOLVENT LIQUID BUFFER SPRAY**

Revision date: 19.10.2015

Revision No: 2,1

Product code: 00156-0090



**14.3. Transport hazard class(es):** 2

**14.4. Packing group:** -

Hazard label: 2.1



Classification code: 5F

Limited quantity: 1 L / 30 kg

Excepted quantity: E0

**Marine transport (IMDG)**

**14.1. UN number:** UN 1950

**14.2. UN proper shipping name:** AEROSOLS (Hydrocarbons)

**14.3. Transport hazard class(es):** 2.1

**14.4. Packing group:** -

Hazard label: 2.1



Marine pollutant: Yes

Limited quantity: 1 L / 30 kg

Excepted quantity: E0

EmS: F-D, S-U

**Air transport (ICAO)**

**14.1. UN number:** UN 1950

**14.2. UN proper shipping name:** AEROSOLS

**14.3. Transport hazard class(es):** 2.1

**14.4. Packing group:** -

Hazard label: 2.1



Limited quantity Passenger: 30 kg G

Passenger LQ: Y203

Excepted quantity: E0

IATA-packing instructions - Passenger: 203

IATA-max. quantity - Passenger: 75 kg

IATA-packing instructions - Cargo: 203

IATA-max. quantity - Cargo: 150 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes



**14.6. Special precautions for user**

Handle in accordance with good industrial hygiene and safety practice.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

The transport takes place only in approved and appropriate packaging.

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**



**TIP TOP SOLVENT LIQUID BUFFER SPRAY**

Revision date: 19.10.2015

Revision No: 2,1

Product code: 00156-0090



**EU regulatory information**

2004/42/EC (VOC): 658 g/l

**National regulatory information**

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 2 - water contaminating

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information**

**Abbreviations and acronyms**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
IMDG = International Maritime Code for Dangerous Goods  
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization  
MARPOL = International Convention for the Prevention of Pollution from Ships  
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals  
CAS = Chemical Abstract Service  
EN = European norm  
ISO = International Organization for Standardization  
DIN = Deutsche Industrie Norm  
PBT = Persistent Bioaccumulative and Toxic  
vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose  
LC = Lethal concentration  
EC = Effect concentration  
IC = Median immobilisation concentration or median inhibitory concentration

**Relevant H and EUH statements (number and full text)**

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

**Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

**Safety Data Sheet** according to Regulation (EC) No 1907/2006

REMA TIP TOP AG

**TIP TOP SOLVENT LIQUID BUFFER SPRAY**

Revision date: 19.10.2015

Revision No: 2,1

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*